

analysis of morphofunctional states but also the possible implication of certain pathological conditions. This means that rather than idealizing the rich variety of neurons into a single model, the functional features of neurons with special geometry of dendritic trees may be approached.

Obviously some of the most important problems to be tackled relate to the significance of possible spatial inhomogeneities in excitability. The number of instances where more than one site of spike initiation appears to be present in central neurons is quite appreciable (ECCLES, LIBET & YOUNG, 1958; LORENTE DE NÓ & CONDOURIS, 1959; SPENCER & KANDEL, 1961; PURPURA, 1967; LLINÁS & NICHOLSON, 1969,

1971; KIDOKORO, 1969; KUNO & LLINÁS, 1970; KORN & BENNETT, 1971; BAKER & PRECHT, 1972; CZÉH, 1972; PRECHT, 1975; LLINÁS & HESS, 1976; ZIPSER & BENNETT, 1976). The problems relating to such parameters and their probable functional nuances as circuit modifiers may become of significance in the study of such important functions as learning, which may in fact be subserved by subtle modifications of neuronal excitability or geometry.

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